

NICHOLAS FREEMAN MEHRLE

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EDUCATION

Johns Hopkins University **Baltimore, MD**
M.A. Physics and Astronomy May 2016
B.S. Physics May 2016
– **Additional Majors:** Mathematics & Applied Mathematics and Statistics
– **GPA:** 3.91/4.0

EMPLOYMENT & RESEARCH

Optiver US LLC **Chicago, IL**
Derivatives Trader July 2016 - Present
– High frequency options market maker
– Application of data mining techniques to and time series analysis of market data

Johns Hopkins University **Baltimore, MD**
Research Assistant - Department of Physics and Astronomy May 2013 - May 2016
– Authored master's thesis on telescope design and physics of Cosmic Microwave Background
– Design and construction of variable delay polarization modulator for microwave band telescope

CERN **Geneva, Switzerland**
Research Assistant - CMS Experiment Jan - May 2015
– Statistical analysis to discriminate production methods of Higgs boson

Johns Hopkins University Applied Physics Lab **Laurel, MD**
Technical Intern - Applied Concepts and Technology Group May - Aug 2014
– Developed and tested feature estimation algorithms
– Graphical UI improvements to large scale simulation environment

Johns Hopkins University **Baltimore, MD**
Teaching Assistant - Department of Mathematics Sept - Dec 2015
– Taught recitation section for Differential Equations

PUBLICATIONS

- *CLASS: The Cosmology Large Angular Scale Surveyor*. With Thomas Essinger-Hileman et al. arXiv reference: 1408.4788.
- *The Cosmology Large Angular Scale Surveyor (CLASS): 38 GHz detector array of bolometric polarimeters*. With John W. Appel et al. arXiv reference: 1408.4789.

MISCELLANEOUS

Programming: Python, Java, JavaScript, C, C++, Matlab, Mathematica, R, HTML
CSS, L^AT_EX, VBA

Organizations: Phi Beta Kappa, Sigma Pi Sigma, Johns Hopkins Mock Trial, Wading Team

Testing: Physics GRE - 960/990 (91st percentile)